

OLYMPIC COAST NATIONAL MARINE SANCTUARY

A Report for Sanctuary Advisory Council Members

Reporting Period: Jan. 16, 2016- Mar. 18, 2016

ABOUT THE SANCTUARY

Olympic Coast National Marine Sanctuary spans 3,189 square miles of marine waters off the rugged Olympic Peninsula coastline. The sanctuary extends 25 to 50 miles seaward, covering much of the continental shelf and several major submarine canyons.

The sanctuary protects a productive upwelling zone home to numerous marine mammal and seabird species, diverse populations of kelp and intertidal algae, and thriving invertebrate communities. The sanctuary is also rich in cultural resources, with over 150 documented historical shipwrecks and the vibrant contemporary cultures of the Makah, Quileute and Hoh Indian Tribes, and the Quinault Nation.

OFFICE REPORT

OLYMPIC COAST NATIONAL MARINE SANCTUARY NEWS AND PROGRAM UPDATES

Organized by Olympic Coast National Marine Sanctuary (OCNMS) management plan priority areas.

FULFILL TREATY TRUST RESPONSIBILITY

Sanctuary Reviews Permitting Consultations with Tribes
Olympic Coast National Marine Sanctuary staff reached out to the Quileute and Hoh Tribes and the Quinault Indian Nation to discuss a protocol for consulting on sanctuary permit requests. Activities normally prohibited within the sanctuary by its regulations may occur under certain conditions, if approved through a sanctuary permit. Before issuance of a permit, OCNMS first consults with the tribes to provide opportunity for input on potential impacts of the activity and conditions to be included in a permit to mitigate impacts, as well as to inform tribal representatives of activities within their treaty areas. OCNMS shared their current procedures for permit review and tribal consultation and asked where improvements were recommended. In 2015, OCNMS had a government-to-government meeting with the Makah Tribe on the same subject, resulting in mutual understanding and agreement on permit consultation procedures.

ACHIEVE EFFECTIVE AND COORDINATED MANAGEMENT

Federal Managers Coordinate on Managing Olympic Coast

On February 4, senior leadership for Olympic Coast National Marine Sanctuary, Olympic National Park, and United States Fish and Wildlife Service/Washington Maritime National Wildlife Refuge Complex met to exchange information on issues and opportunities facing our three jurisdictions that have significant overlap. Sanctuary staff presented on key topics including the Pacific Northwest Bay Watershed and Education Program (B-WET) and ocean science programs, our evolving work on ocean acidification, the need for replacing the sanctuary research vessel, and an enforcement issue involving illegal discharges within the sanctuary. The group also discussed opportunities to collaborate on public engagement especially with National Park Service's Centennial celebration this year and how to improve messaging on coastal resources. State district congressional staff from Senator Murray, Senator Cantwell, and Representative Kilmer also attended to learn more about current issues.

Sanctuary and U.S. Coast Guard collaborate on Vessel Incidents

Since the 1994 designation of Olympic Coast National Marine Sanctuary, staff members have kept records of vessel incidents. This ongoing ad-hoc effort includes some near-miss events, sanctuary violations and occasions where vessels sank or grounded in the sanctuary. Recently the sanctuary worked to develop a more standardized approach, resulting in a database with roughly 100 records. The next step in this project is to work with partner agencies to see if their records include additional incidents and/or additional details. The 13th U.S. Coast Guard District has agreed to review its Marine Information for Safety and Law Enforcement (MISLE) database and provide information on vessel incidents that have taken place in the sanctuary.

Olympic National Park and Olympic Coast National Marine Sanctuary Education Teams Work to Increase Public Reach

Education and outreach staff from Olympic National Park and Olympic Coast National Marine Sanctuary held an annual meeting to discuss topics of mutual interest including programs and initiatives, media and outreach, and upcoming special

events such as Get Into Your Sanctuary Day and the Centennial anniversary of National Park Service. The purpose of the meeting was to find opportunities to amplify each other's work and collaborate on publicity in order to reach greater audiences.

OCNMS Recognizes Volunteer of the Year 2015 Lee Whitford

Lee Whitford was nominated for the National Marine Sanctuary Foundation's 2015 Volunteer of the Year Award for her involvement as the Chair of the Olympic Coast National Marine Sanctuary advisory council. As the education representative, she brings years of experience in diverse education-oriented roles and serves as an independent citizen. As Advisory Council Chair, Lee provides strategic thinking and significant input on the priorities for the council as well as successfully planning and executing six meetings per year. Her dedication to outreach and education has influenced many of the council recommendations, as she bridges science and research initiatives to highlight the sanctuary and its resources. In addition to her advisory council work, Lee provides instrumental support to OCNMS and Pacific Northwest B-WET programs through regional strategic planning outreach support and K-12 education program implementation. Her efforts have enhanced key programs including outreach efforts through the OCNMS website, teacher professional development workshops and place-based student activities. National Marine Sanctuary Foundation will announce the Volunteer of the Year in June at the Ocean Awards Gala during Capitol Hill Ocean Week in Washington, D.C. Volunteers are the lifeblood of the National Marine Sanctuary System and are truly ambassadors to our national marine treasures. Thank you for all your hard work Lee!



IMPROVE OCEAN LITERACY

Olympic Coast National Marine Sanctuary Celebrates STEM at Port Angeles Library



Education Specialist, Nicole Harris, and Education and Volunteer Stewardship Coordinator and Washington Service Corps AmeriCorps member, Becca Lewis, represented Olympic Coast National Marine Sanctuary at the annual Celebrate Science, Technology, Engineering and Math (STEM) Career Fair for local fifth graders at the Port Angeles Public Library. During this event, several hundred local fifth grade students were able to participate in activities associated with new a educational product, *National Marine Sanctuaries of the West Coast Deep Coral Communities: Sentinels of a Changing Ocean*, including learning the essential principles and fundamental concepts of ocean literacy (see <http://sanctuaries.noaa.gov/education/teachers/deep-coral-communities/deep-sea-program.pdf>).

National Biodiversity Teach-in Event Featured “National Marine Sanctuaries: Sentinels of a Changing Ocean”

Olympic Coast National Marine Sanctuary teamed up with NOAA's Ocean Acidification Program and EarthEcho to present “National Marine Sanctuaries: Sentinels of a Changing Ocean” to middle and high school students across the nation during a live streamed webinar. This presentation, focusing on biodiversity in sanctuaries and the issue of ocean acidification, is part of a month-long webinar series to raise awareness about the importance of biodiversity and inspire participants to take action in its protection. Elgin High School Environmental Science classes located in Illinois initiated this webinar series after learning about biodiversity through the story of Martha, the last known living Passenger Pigeon who died on September 1, 1914. The series includes five full days of presentations from scientists, conservationists and educators, including celebrities like Ed Begley Jr. and Phillipe Cousteau.

Sanctuary Underwater Robotics Club Mentor Attends ROV Training in Seattle

Olympic Coast National Marine Sanctuary staff attended a one-day Marine Advance Technology Education (MATE) workshop for Remotely Operated Vehicle (ROV) club mentors (see <http://pacificnorthwest.marinetech2.org/>). The workshop focused on ROV physics, ROV-in-a-bag pool testing and piloting, ROV control box wiring, and how to use ROVs in a classroom setting. OCNMS, in partnership with Feiro Marine Life Center, hosts an after-school underwater robotics club for middle and high school students. Club participants build their ROVs from tether building to control box wiring to vehicle assembly as they prepare for the SeaPerch Kitsap Underwater Robotics competition in late May 2016 (see <http://www.seaperch.org/index>).



Reading of *A Tsunami Boat Comes Home*

On January 22, Olympic Coast National Marine Sanctuary hosted a reading of the bilingual children's book *The Extraordinary Voyage of Kamome: A Tsunami Boat Comes Home*. The reading was followed by a discussion with co-authors Lori Dengler, an Emeritus Professor of Geology at Humboldt State University, and Amya Miller, a special adviser to the city of Rikuzentakta, Japan. Illustrator Arcata artist Amy Uyeki was also present. On April 7, 2013, a little over two years after an earthquake triggered a massive tsunami devastating coastal areas of Japan, a lone boat washed up on the shores of Crescent City, California. The boat was linked to a high school in Rikuzentakata, Japan, beginning a story that has linked two tsunami-vulnerable communities on opposite sides of the Pacific. The story, intended for elementary grades, provides a window for discussing earthquakes, marine debris, preparedness and cultural awareness (www2.humboldt.edu/kamome/). Thirty community members attended the event and participated in discussions on Clallam County emergency preparedness, personal preparedness, marine debris and fostering connections across the Pacific basin.

Discover Olympic Coast Movie Night at Poser Yoga Studio

On January 30, Olympic Coast Discovery Center Manager, Karlyn Langjahr, hosted a movie night at Poser Yoga studio in Port Angeles. After giving a brief introduction to the sanctuary, she showed "Discover Olympic Coast," a SeaLife Productions film, featuring the sanctuary's diverse wildlife and habitats. The 30-minute video was filmed by Florian Graner and produced in partnership with the North Pacific Coast Marine Resources Committee. The movie night was a social celebration for Poser Yoga studio's members and their family/friends to conclude the January 30-Day health challenge.



Photo credit Florian Graner

Olympic Coast Staff Participate in Ocean and Climate Change Interpretation Training



Olympic Coast National Marine Sanctuary Education members Nicole Harris and Karlyn Langjahr participated in a National Network for Ocean and Climate Change Interpretation (NNOCCI) training in Tampa, FL, hosted by the Florida Aquarium. NNOCCI designs semester-long online and in-person trainings with peer groups of 22 informal science educators on strategic framing. Participants represent various zoos, aquariums, science centers or other types of visitors centers from around the U.S. and join as a team in a Study Circle. Their first meeting dealt with "The Science of Communication" and consisted of five lessons to understand visitors in order to better effectively communicate ocean and climate change issues. NNOCCI is funded by National Science Foundation, New England Aquarium, and partners with Woods Hole Oceanographic Institute, Penn State University and

NewKnowledge.org (<http://climateinterpreter.org/>).

Tribal Students Participate in ROV Workshop

On February 29, Quileute Tribal School students met with Olympic Coast National Marine Sanctuary staff and University of Washington School of Oceanography staff to learn about ocean research through Remotely Operated Vehicles (ROVs). Hosted at the Olympic Natural Resource Center in Forks, Washington, the program was part of President Obama's *My Brother's Keeper Initiative*, addressing the shortage of young people of color in science, technology, engineering and mathematics (STEM) careers. Student participants were able to see how ROVs conduct deep sea exploration in national marine sanctuaries, followed by the opportunity to build and test their own student ROVs with University of Washington Oceanography staff and Marine Advanced Technology Education (MATE) mentors.



Sanctuary Participates in University of Washington's Environmental Career Fair



Olympic Coast National Marine Sanctuary staff participated as one of 32 regional organizations attending the University of Washington's Environmental Career Fair. Organized by the University of Washington's College of the Environment, students ranging from all levels of higher education came through the Mary Gates Hall, making connections that could lead to volunteer experiences, internships, and career level positions. OCNMS staff interacted with more than 300 students looking for information about sanctuary careers, possible internships and skills that benefit a career in ocean conservation.

Suquamish Tribe High School Students Investigate Deep Coral Communities

On February 19, students from Suquamish Chief Kitsap Academy Tribal School visited the Olympic Coast National Marine Sanctuary classroom to learn about the sanctuary as part of Ecosystem Pen Pals Program. Fifteen high school students from Suquamish Tribe are corresponding with high school students in Oahu, Hawaii, and will include information on OCNMS and our diverse habitats and organisms in their second letter to their Hawaiian pen pals. Following an overview of the National Marine Sanctuary System and Olympic Coast, students participated in Deep Coral Communities of West Coast Sanctuaries activities (<http://sanctuaries.noaa.gov/education/teachers/deep-coral-communities>). Using video from deep sea transects in the sanctuary, students were able to try their hand at identifying and counting coral species and other organisms found in the deep sea, while learning about technologies used to research this unique and important habitat. The field trip concluded with a short visit to Olympic Coast Discovery Center and Feiro Marine Life Center.

Fun at Beachcombers' Fun Fair

On March 5-6 Olympic Coast National Marine Sanctuary hosted an education and activity booth at the 29th Annual Beachcombers' Fun Fair in Ocean Shores. Held at Ocean Shores Convention Center in southern Washington, the event featured competitive beachcombing exhibits, seminars, informational booths and vendors. Many families were attracted to the children's science fair on Saturday morning as well as the Sunday morning beach walk. Approximately 1,000 people attended the event. The sanctuary's booth educated participants about planktonic organisms through a build-a-plankton activity and marine debris, highlighting the NOAA Marine Debris Program and monitoring efforts. OCNMS also provided information supporting Washington CoastSavers to recruit beach cleanup volunteers for the April 23rd Washington Coast Cleanup and the July 5th Ocean Shores cleanup. Rebecca Lewis, AmeriCorps service member and Education and Stewardship Specialist for OCNMS, delivered a one-hour presentation on America's Underwater Treasures featuring the film, "Discover the Olympic Coast" during the seminar series. This Sealife Productions film was produced by BBC and National Geographic videographer, Florian Graner, in partnership with North Coast Marine Resources Committee.



Olympic Coast National Marine Sanctuary Represented at Franklin Elementary Science Night

Education staff represented Olympic Coast National Marine Sanctuary at the annual Franklin Elementary Science Night for local K-6 students and their families. More than 300 students and family members were able to participate in the sanctuary's hands-on sand study featuring sand from all over the world.

Facility Partners Tour Behind-the-Scenes of Seattle Aquarium

On March 4, Olympic Coast Discovery Center Manager, Karlyn Langjahr, joined Feiro Marine Life Center staff and members of their Facilities Committee for a behind-the-scenes tour of Seattle Aquarium. They learned about the different types of aquarium tank systems and structure to consider as they consider options for improved visitor services in Port Angeles.

NOAA Pacific Northwest Outreach Team Plan Regional Collaboration Efforts

On March 17, an impressive group of 18 NOAA outreach staff met at NOAA Sand Point office in Seattle to share resources and discuss opportunities for collaboration. The following programs and offices were represented: NOAA Fisheries West Coast, NOAA Olympic Coast National Marine Sanctuary, NOAA Pacific Northwest B-WET, NOAA Alaska Fisheries Science Center, NOAA Pacific Marine Environmental Lab, NOAA Pacific Hydrographic Branch, NOAA Office of Coastal Management – National Estuarine Research Reserve, NOAA Office of Response and Restoration, NOAA Diving Program, Joint Institute for the Study of the Atmosphere and Ocean (JISAO), NOAA Habitat Conservation Restoration Center, NOAA Marine Debris, NOAA Emergency Response Division, NOAA Western Region Collaboration Team (NOAA West), National Weather Service, Washington Sea Grant and NOAA Fisheries Communications.

Seattle Elementary School Students Learn About Albatrosses and Marine Debris

On March 17, Washington Service Corps AmeriCorps member and Education and Volunteer Stewardship Coordinator at Olympic Coast National Marine Sanctuary, Becca Lewis, represented the sanctuary for students at Louisa Boren STEM K-8 and Arbor Heights elementary schools in Seattle, WA. Her presentation provided the opportunity for 48 fifth grade students to participate in an albatross bolus dissection activity, while learning about national marine sanctuaries and the connection between marine debris and these legendary seabirds.

CONDUCT COLLABORATIVE RESEARCH, ASSESSMENTS AND MONITORING TO INFORM ECOSYSTEM-BASED MANAGEMENT

Washington State Sea Otter 2015 Census

Results were released for the annual sea otter census led by Washington Department of Fish and Wildlife and U.S. Fish and Wildlife Service and supported by multiple partners, including field support by Olympic Coast National Marine Sanctuary staff and volunteers. A combination of aerial surveys and shore based counts were conducted between June 22-25, 2015 between the Columbia River and Freshwater Bay in the Strait of Juan de Fuca. The highest survey count from the four survey days is used as the estimated population. The 2015 sea otter population estimate is 1,394 individuals, down from 1,573 sea otters in 2014. The average population growth rate continues to remain positive, or 8.6% for the Washington sea otter population. Researchers suggested that modifications to the methods may have contributed to a lower estimate in 2015. The largest group ever recorded south of Destruction Island was a group of 134 adults and 9 pups seen near Willoughby Island, which indicates expansion southward by the females. Surveys for 2016 are planned for the week of June 27.

Olympic Region Harmful Algal Bloom Partnership Conducts Strategic Planning

Olympic Coast National Marine Sanctuary staff participated in a one-day strategic planning workshop for the Olympic Region Harmful Algal Bloom Partnership. The partnership was formed in 1998 with NOAA funding to foster coordination and collaboration between state and tribal shellfish resource managers and interested parties. This collaboration will help protect public health and improve understanding and early warning capacity associated with biotoxins from harmful algal blooms. State funding generated from recreational shellfish licenses now supports the partnership, with funding routed through and coordination responsibility residing with University of Washington's Olympic Natural Resources Center. Partners coordinate sampling of nearshore waters to detect presence of harmful algae species and biotoxin levels in shellfish. Research continues into conditions that stimulate bloom events and trigger production of toxins, as well as research into simpler, quicker and more accurate analytical methods. Sanctuary staff has contributed to strategic planning, field collection of water samples, and maintenance of coastal moorings to characterize oceanic conditions. The west coast-wide intense harmful algal bloom in 2015 had enormous economic impacts on coastal communities, with extended closures of recreational and commercial razor clam and crab fisheries.

R/V *Tatoosh* Returns to Port Angeles

On February 25, R/V *Tatoosh* transited from La Push to Port Angeles in a brief good weather window. Immediately following its return, the port engine repairs were completed by a local technician and the engine has been restored to full status. The vessel will now undergo a two-month repair period in preparation for the next field season. The winter in La Push was very hard on the vessel but with time and a significant capital investment, R/V *Tatoosh* will soon be ready for another field season in Olympic Coast National Marine Sanctuary.

CONSERVE NATURAL RESOURCES IN THE SANCTUARY

Washington CoastSaver of the Year Recognized Posthumously

Washington CoastSavers held a gathering in Seattle to present its CoastSaver of the Year award posthumously to David Lindau, a founding member of Washington Clean Coast Alliance who left us this past fall. David was instrumental in defining the mission and structure for CoastSavers, and for many years he maintained the organization's website and innovative on-line registration system for beach cleanups on the outer coast of Washington. Speakers noted David's extraordinary ability to define a clear mission, identify common interests, and facilitate agreement on cleanup objectives from a diverse group of supporters. Washington CoastSavers coordinates federal, tribal, state, county and non-government partners in alliance for three major coastal debris cleanups that address the over 200 miles along the outer coast of Washington and Strait of Juan de Fuca.

Sanctuary and Washington CoastSavers Represented at Klahhane Hiking Club

Olympic Coast National Marine Sanctuary Education and Volunteer Stewardship Coordinator, Becca Lewis, represented the Washington CoastSavers Program to members of the Klahhane Hiking Club (<http://klahhaneclub.org/>). Becca presented an overview of OCNMS, Washington CoastSavers Program, the issue of marine debris and the upcoming Washington Coast Cleanup. Many Klahhane Hiking Club members have been active in past beach cleanup efforts, and are now equipped with detailed background information to share with other volunteers, as well as a deeper connection to the marine animals and habitats that are negatively affected by marine debris.

AmeriCorps Joins Port Townsend Marine Life Center at Annual Service Event

Washington Service Corps AmeriCorps member, Becca Lewis, who serves as Education and Volunteer Stewardship Coordinator at Olympic Coast National Marine Sanctuary, participated in a weed pull at Fort Worden State Park. The weed

pull was organized by Port Townsend Marine Science Center as a 4th annual community service project on Dr. Martin Luther King, Jr. Day, in recognition of Dr. King. More than 20 people from the surrounding communities came to help remove invasive weeds from Fort Worden State Park.

Sanctuary Consults with Northwest Fisheries Science Center on Research Trawling

As part of a consultation with all five West Coast national marine sanctuaries, OCNMS is in the process of consulting with NOAA Northwest Fisheries Science Center (NWFSC) on their stock assessment survey activities. Through this consultation, OCNMS plans to share data it has compiled on locations of known biogenic habitat and seafloor obstructions, including historic and recent shipwrecks and large debris items that should be avoided by NWFSC research trawls. This consultation is associated with NWFSC's programmatic environmental assessment on fisheries research.

SANCTUARY PERMITTING

Issued Permits and Authorizations

None.

Pending Permit Requests

OCNMS-2016-001 – Michael Zieserl, JOA Surveys

Project Title: Temporary NOAA Tide Gauge at Tskawahyah Island (Cannonball Island)

Permitted Activity: Altering or disturbing the seafloor in connection with the placement, operation and removal of a temporary NOAA tide gauge.

Project Location: The majority of the installation will be on Makah lands on Tskawahyah Island. A small portion of the installation will extend below mean lower low water into the sanctuary.

Permit Duration: Six months, April through September 2016

Comment: The applicant reports that approval for a single installation has been provided by the Makah Tribe. A modified request for a duplicate/redundant installation has not been approved by the Makah. OCNMS approval for a single or duplicate is pending the Makah determination. Impacts to intertidal resources will be minor (area impacts) and temporary. All equipment will be removed at the end of the project.

OCNMS-2016-002 – Brad Hanson, NOAA Fisheries NW Fisheries Science Center

Project Title: Determining the Distribution of Killer Whales and Other Cetaceans in the Coastal Waters of the U.S. Using Acoustic Recorders.

Permitted Activity: Disturbance of the seafloor from deployment of 7 acoustic moorings and abandonment of anchor weights with annual instrument servicing

Project Location: 4 moorings approximately 3 miles off shore between the international border and Cape Elizabeth, and 3 moorings located in deeper waters of the sanctuary

Permit Duration: 5 years, through December 2019

Comment: Research addresses the distribution of the Southern Resident killer whales off Washington's outer coast for which data are sparse. Data will support evaluation of the outer coast as critical habitat for the Southern Resident killer whales. This research is supported by funding from the U.S. Navy. In 2014, proposed mooring locations were selected based on scientific needs and placement to minimize interaction with commercial fishing activity, and consultations were completed with Coastal Treaty Tribes and various non-tribal commercial fishing representatives. As the previous permit expired before amendment, a new permit for this activity is required. Pending is drafting of permit conditions, particularly one requiring evaluation of options for mooring weight retrieval without abandonment.

OCNMS-2016-003 – Florian Graner, Sealife Productions, and Steven Fradkin, Olympic National Park

Project Title: Intertidal StormCam

Permitted Activity: Disturbance of the seafloor to attach camera housing to bedrock

Project Location: Sokel Point, north of Hole in the Wall.

Permit Duration: 1 year, through February 2017

Comment: Approval pending position information from Olympic National Park and consultation response from Quileute Tribe.

LEARN ABOUT YOUR SANCTUARY / NATURAL HISTORY

NOAA Coastal Imagery

NOAA just released its most exciting new product – *Oblique Geo-Referenced Imagery of the West Coast* – collected during February 2016. It was acquired to satisfy a wide range Integrated Ocean and Coastal Mapping (IOCM) requirements, such as

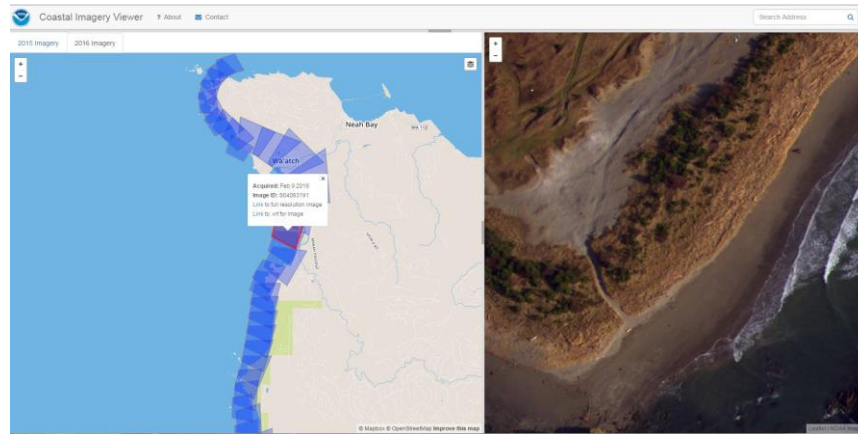
emergency response and coastal zone management. The aerial photography missions were conducted by NOAA's National Geodetic Survey, Remote Sensing Division. Images were acquired from various altitudes ranging from 3,500 to 7,500 feet, using a Trimble Digital Sensor System (DSS) at a 37.5 degree look angle. The ground sample distance (GSD) varies between 15 to 35cm within the image. Clouds occasionally obstruct the image because photography was conducted in a variety of weather conditions. The data is considered public domain and can be shared widely with agencies and interested parties.

Data Viewer:

http://geodesy.noaa.gov/storm_archive/coastal/viewer/index.html

Bulk data download:

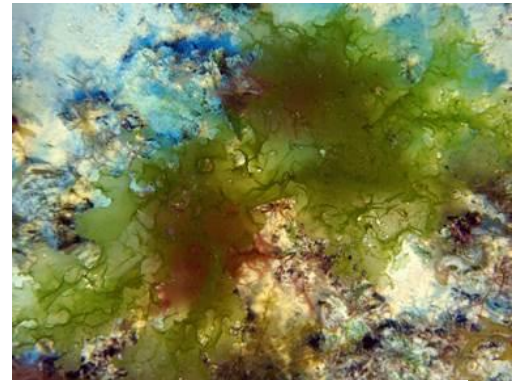
https://coast.noaa.gov/htdata/NGS_oblique/NGSOblique_2016/2016obWestCoast_Imagery.tar



REGIONAL / NATIONAL MARINE SANCTUARY SYSTEM NEWS

Four New Species of Algae Described From Hawaiian Deep-Water Reefs

In February, scientists working with Papahānaumokuākea Marine National Monument announced the discovery four new species of deep-water algae from Hawai'i. The new species were sampled during surveys in PMNM by NOAA divers using advanced SCUBA diving technologies, as well during past expeditions throughout the Main Hawaiian Islands using submersibles operated by the Hawai'i Undersea Research Laboratory. Scientists consulted with the Native Hawaiian community to develop meaningful names for the new species to honor the great importance algae have in Hawaiian culture. One species was named *Ulva iliohaha*, which refers to the foraging behavior of 'Īlioholoikaua, the endangered Hawaiian monk seal, which is one of the best-known inhabitants of PMNM. The study describing the new species was published in the latest issue of the *Journal of Phycology*. The article, titled "New Ulvaceae (Ulvophyceae, Chlorophyta) from mesophotic ecosystems across the Hawaiian Archipelago," is featured as the journal's cover story and can be accessed at <http://onlinelibrary.wiley.com/doi/10.1111/jpy.12375/full>.



ONMS Collaborates with NOAA-NMFS to Assess Compliance with Vessel Speed Reduction

NOAA's Office of National Marine Sanctuaries (ONMS) issued a voluntary Vessel Speed Reduction (VSR) effective May 1 - November 15, 2015. NOAA issued the VSR for the San Francisco Traffic Separation Scheme (TSS) within Cordell Bank, Greater Farallones, and Monterey Bay national marine sanctuaries to protect whales listed under the federal Endangered Species Act, the Marine Mammal Protection Act, and the National Marine Sanctuaries Act. ONMS recommended all vessels 300 gross registered tons or larger reduce speeds to 10 knots while transiting the TSS during this time period to protect endangered whales that annually migrate to the area in summer and fall to feed. During the VSR, NOAA monitored Automatic Identification System (AIS) data to assess the industry's commitment with this effort. NOAA staff met to discuss the data, the current science, and logistics surrounding implementing the VSR in 2015 and in 2016. ONMS is following up with the 300+ companies that transited the sanctuaries during the VSR. The combination of commercial shipping traffic, migratory whale routes and concentrations of whales in feeding areas, increases the risk of ship strikes to whales that can result in serious injury or death to whales. Between 2004 and 2014 there were 229 large whales stranded along the California coast. Of the 229 strandings, the cause of death of 142 was not able to be confirmed and 54 were confirmed via necropsy to be collision with a vessel.

MPA Center Leads Advanced Workshop on Coastal Planning for Protected Area Managers of Chile, Peru, and Argentina

MPA Center staff led a group of experts from ONMS, California, the United Kingdom and Germany to conduct an advanced training workshop on coastal planning for protected area managers and planners from Chile, Peru and Argentina. Sponsored by the GEF-funded Humboldt Current Large Marine Ecosystem Project, the workshop was held in Valparaíso, Chile (January 11-15, 2016) and was co-organized by the ONMS International Capacity Building Program and the Chile's Undersecretariat for Fisheries and Aquaculture. This activity is part of the current US-Chile bilateral MOU on marine and terrestrial protected areas collaboration. The workshop focused on discussing recommended marine planning practices based on real-world experiences, and helped to start developing a regional network of practice among participating countries. The workshop received a very positive evaluation from the 27 attendees and the practitioners who shared their expertise and facilitated.

ONMS Participation in National Week at the Labs

President Obama launched the My Brother's Keeper initiative to address opportunity gaps faced by young people of color and to ensure that students reach their full potential. During National Week at the Labs, federal agencies opened their doors to provide hands-on science, technology, engineering, and math (STEM) and mentoring activities for students. Three national marine sanctuary sites (Flower Garden Banks, Monterey Bay and Olympic Coast) and ONMS headquarters worked with partners to host events that reached 220 students. Events across the system included a hands-on remotely operated vehicle-building workshop, citizen science activities (oceanservice.noaa.gov/news/apr15/volunteer.html), lionfish dissections, and live talks with the *Okeanos Explorer* as it explored deep-water habitats around Papahānaumokuākea Marine National Monument. NOAA Deputy Administrator Vice Admiral Manson Brown attended an event in Washington, DC, with the Homeless Children's Playtime Project, to speak with students about NOAA, career paths and how everyone can help protect the ocean.

Withdrew Proposed Expansion of Hawaiian Islands Humpback Whale National Marine Sanctuary

On March 14, 2016 NOAA's Office of National Marine Sanctuaries withdrew the proposal to expand Hawaiian Islands Humpback Whale National Marine Sanctuary. The March 2015 proposal would have moved the sanctuary from the current single-species management to an ecosystem-based management approach and added additional geographic areas to the sanctuary. NOAA and State of Hawai'i had discussions on the public comments and the State's concerns. NOAA felt the State's concerns were significant enough that the Governor would formally object if NOAA moved forward with the proposal. NOAA decided to withdraw the proposal in light of the Governor's likely objection.

MARINE-RELATED NEWS COVERAGE

Glimpses of our Coastal 'Treasure' Trove

"The pink tritonia nudibranch, with its delicate rose coloring and creamy, feather-like protrusions, is a stunning creature for a sea slug. The tritonia and its ilk can be found in the intertidal areas of the Olympic Coastal National Marine Sanctuary, which stretches from the Copalis River north to Flattery Rocks at the tip of the Olympic Peninsula."

northcoastnews.com/livinglifestyles/glimpses-our-coastal-%E2%80%98treasure%E2%80%99-trove.html?m

Ninth Baby Orca Confirmed in Puget Sound

"Whale researchers say they've documented another baby orca born in Puget Sound. National Oceanic and Atmospheric Administration (NOAA) officials said on Facebook Tuesday their researchers documented the new calf Monday."

www.seattletimes.com/seattle-news/ninth-baby-orca-confirmed-in-puget-sound/

NASA, NOAA Analyses Reveal Record-Shattering Global Warm Temperatures in 2015

"Earth's 2015 surface temperatures were the warmest since modern record keeping began in 1880, according to independent analyses by NASA and the National Oceanic and Atmospheric Administration (NOAA)."

www.nasa.gov/press-release/nasa-noaa-analyses-reveal-record-shattering-global-warm-temperatures-in-2015/

Feiro Marine Center Begins Expansion Plans

"The Feiro Marine Life Center has put out bids for their proposed expansion on the Port Angeles City Pier. As Feiro waits for those bids to come in, they are planning ahead to set up public input forums to assist in the master plan for the marine center, as well as the rest of the pier."

www.konp.com/local/11297

The Coast Guard Rescues Five From Sinking Vessel Near La Push, Washington

“The Coast Guard rescued five fishermen after their vessel took on water and sank 30 miles outside of La Push, Washington, Sunday. A Coast Guard Station Quillayute River 47-foot Motor Life Boat crew recovered the fishermen from their life raft and brought them back to La Push without medical concerns.”

www.uscgnews.com/go/doc/4007/2779126/

NOAA Decides Against Proposed Sanctuary Expansion

“NOAA will keep the Hawaiian Island Humpback Whale National Marine Sanctuary as it was originally intended, a sanctuary to protect humpback whales and their habitat.”

bigislandnow.com/2016/01/26/noaa-decides-against-proposed-sanctuary-expansion/

Harmful Algal Blooms: A Sign of Things to Come?

“Last year, a vast mass of poisonous algae bloomed off the West Coast, from California to Alaska. One of the largest of its kind ever recorded in the region, the bloom shut down shellfish fisheries all along the coast, impacted the livelihoods of fishermen, and threatened the health of many marine mammals.”

www.nmfs.noaa.gov/podcasts/2016/01/habs_with_vera_trainer.html

Local High School Students Showcase Artwork Focused on Endangered Species

“Students from five high schools within the Long Beach Unified School District in Southern California participated in the 8th annual NOAA Art Contest. The contest was just one facet of NOAA Day at the Aquarium of the Pacific on November 14, 2015.”

www.westcoast.fisheries.noaa.gov/stories/2016/26_01262016_noaa_day_art_contest.html

Comments Sought for NOAA's 5-year ESA review of J, K and L pods

“NOAA Fisheries is conducting a five-year review of Southern Resident killer whales as required under the Endangered Species Act (ESA). A five-year review is a periodic process conducted to ensure that the listing classification of a species remains accurate. The review is based on the best scientific and commercial data available at the time of the review.”

sanjuanislander.com/index.php?option=com_k2&view=item&id=20982:comments-sought-for-noaa-s-5-year-esa-review-of-j-k-and-l-pods&Itemid=10973

All the Plastic That We're Throwing in the Oceans Could be Hurting Baby Oysters

“Tiny bits of plastic in the ocean could have a serious impact on the ability of oysters to reproduce, a new study suggests, affecting everything from the movement of their sperm to the growth of their babies. The study is just the latest in a long string of research on the harmful effects of plastic on marine organisms.”

www.washingtonpost.com/news/energy-environment/wp/2016/02/02/all-the-plastic-that-were-throwing-in-the-oceans-could-be-hurting-baby-oysters/

Ship Noises Could Hurt Endangered Killer Whales, Study Finds

“Baleen and toothed whales alike could be suffering because of noisy ships, according to a study published Tuesday in PeerJ. Because whales use sound to communicate and navigate, an interfering noise at the right frequency can leave them distressed, lost or unable to hunt.”

www.washingtonpost.com/news/speaking-of-science/wp/2016/02/03/ship-noises-could-hurt-endangered-killer-whales-study-finds/

Seattle Seafood Company Alters Proposal to Move Salmon Farm out of Port Angeles Harbor

“A seafood company has slightly altered its proposal to move its Atlantic salmon farm operation out of Port Angeles Harbor and into the Strait of Juan de Fuca. In addition, all of the 11 permits required for the proposed new pens, located 1.7 miles north-northeast of Green Point, have been completed.”

www.peninsuladailynews.com/article/20160203/news/302039986/seattle-seafood-company-alters-proposal-to-move-salmon-farm-out-of

State Seeks Federal Disaster Declarations for Commercial Crab Fishing

“In a letter to U.S. Secretary of Commerce Penny Pritzker, Gov. Edmund G. Brown Jr. today requested federal declarations of a fishery disaster and a commercial fishery failure in response to the continued presence of unsafe levels of domoic acid, a potent neurotoxin, in Dungeness and rock crab fisheries across California and the corresponding closures of those fisheries.”

cdfgnews.wordpress.com/2016/02/09/state-seeks-federal-disaster-declarations-for-commercial-crab-fishing

Marine Mammal Tissue Tested for Toxins

“Researchers at NOAA’s Northwest Fisheries Science Center are testing thousands of samples from dead marine mammals to track the spread of toxins along the West Coast.”

www.king5.com/story/tech/science/environment/2016/02/17/marine-mammal-tissue-tested-toxins/80528302/

In the Salish Sea, Whale Watchers Frequently Getting Too Close

“Anyone who has been whale watching from a small boat or kayak appreciates the excitement that comes from getting up close and personal. To hear the whales breathing, feel the spray against your skin, and experience their thunderous breaches can feel almost spiritual.”

www.hakaimagazine.com/article-short/salish-sea-whale-watchers-frequently-getting-too-close

A New Study Shows Warmer Water Temperatures Are Linked To Sea Star Die-Offs

“A massive die-off of sea stars a few years ago was caused by a virus. But a study published this week shows that higher water temperatures also played a big role.”

www.kplu.org/post/new-study-shows-warmer-water-temperatures-are-linked-sea-star-die-offs

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www.kplu.org/post/new-study-shows-warmer-water-temperatures-are-linked-sea-star-die-offs

The Blob is Dead, Scientists Declare

“The giant patch of warm water in the northern Pacific – nicknamed The Blob – has finally broken up. Compare images from this year and last.”

earthsky.org/earth/warm-blob-is-dead-scientists-declare

Elwha: Roaring Back to Life

“The Elwha watershed is booming with new life, after the world’s largest dam removal. The first concrete went flying in September 2011, and Elwha Dam was out the following March. Glines Canyon Dam upriver tumbled for good in September 2014.”

projects.seattletimes.com/2016/elwha

Feds Reviewing Endangered Species Status for Orcas

“Weeks after the first new orca calf of 2016 was seen among the southern resident orca population, the National Oceanic and Atmospheric Administration announced the start of a five-year status review of the species.”

www.seattletimes.com/seattle-news/feds-reviewing-endangered-species-status-for-orcas/

How Helping Salmon Could Save Puget Sounds' Baby Orcas

“When the new baby orca L120 was spotted in just off of San Juan Island in Puget Sound, Ken Balcomb passed out cigars to celebrate. But the long-time killer whale researcher knew that the southern resident orca pods needed a lot more than one new member.”

<http://kuow.org/post/how-helping-salmon-could-save-puget-sounds-baby-orcas>

Whales Aren't the Only Animals Affected by Noise -- Study

“Shipping traffic and offshore construction may change the behavior of invertebrates, according to a new study that hints at how man-made sound affects the marine ecosystem.”

www.eenews.net/greenwire/2016/02/08/stories/1060031993

Quinault Indian Nation Plans for Village Relocation

“The homelands of the Quinault Indian Nation (QIN) are located on the Pacific coast of Washington’s Olympic Peninsula—the tribe’s culture and economy depend on the bounty of the land, forests, rivers, and ocean. With its location on the Pacific Ocean, the risk and uncertainty of tsunami has been, and continues to be, ever-present. Today, though, the Quinault community faces a different type of threat to its daily life: impacts from climate change.”

www.climate.gov/news-features/climate-case-studies/quinault-indian-nation-plans-village-relocation

Beachcombers Fair With Educational Flair

“The Beachcombers Fun Fair this weekend is not all about fun, although there’s still plenty of the fun events and speakers longtime participants have come to expect and enjoy. The 29th annual event features exhibits, seminars, information booths, and vendors on Saturday and Sunday; a kid’s science fair Saturday morning plus beach walks on Sunday morning with popular hosts Dr. Curtis Ebbesmeyer and Alan Rammer, two of the preeminent beachcombers in the Northwest.”

thedailyworld.com/news/local/beachcombers-fair-educational-flair

Orca Tracking Resumes Along Outer Coast

“Washington state’s resident orcas have been foraging up and down the outer coast in the past week, spending considerable time at the mouth of the Columbia River, according to updates by NOAA Fisheries West Coast Science and Management.”

www.chinookobserver.com/co/local-news/20160301/orca-tracking-resumes-along-outer-coast

Marine Sanctuary Appoints Advisory Members

“NOAA’s Olympic Coast National Marine Sanctuary recently announced three new members to serve on its sanctuary advisory council. The newly appointed advisory council members are Michael Barton, education; Thomas Burlingame, fishing; and Cedar Shannon, tourism/economic development alternate.”

www.sequimgazette.com/news/371559031.html

OCNMS ONLINE

Visit our website at: <http://olympiccoast.noaa.gov/>.

Follow us on Facebook and Twitter!

<https://www.facebook.com/usolympiccoastgov>

<https://twitter.com/olympiccoast>

Please take a few moments to peruse the site. Your feedback is greatly appreciated.

*Comments and suggestions can be sent to:
Jacqueline.Laverdure@noaa.gov.*

OCEAN-RELATED WEBSITES

National Oceanic and Atmospheric Administration

<http://www.noaa.gov/>

National Ocean Service

<http://www.nos.noaa.gov/>

Office of National Marine Sanctuaries

<http://www.sanctuaries.nos.noaa.gov/>

NOAA Marine Debris Program

<http://marinedebris.noaa.gov/>

NOAA Online Media Library

<http://sanctuaries.noaa.gov/photos>

Encyclopedia of National Marine Sanctuaries

<http://www8.nos.noaa.gov/onms/park/>

NOAA Ocean Explorer

<http://oceanexplorer.noaa.gov/>

National Data Buoy Center

<http://www.ndbc.noaa.gov/rmd.shtml>

Washington’s Ocean Resources

<http://www.ecy.wa.gov/programs/sea/ocean/index.html>

CoastWatch – West Coast Regional Node

<http://coastwatch.pfel.noaa.gov/>

Northwest Association of Networked Ocean Observing Systems

<http://www.nanoos.org/>

NOAA’s Pacific Marine Environmental Laboratory

<http://www.pmel.noaa.gov/>

OLYMPIC COAST NATIONAL MARINE SANCTUARY

Learn More About Your Sanctuary

The Sanctuary Office Report is produced bi-monthly by Olympic Coast National Marine Sanctuary in conjunction with sanctuary advisory council meetings. To learn more about the sanctuary, please visit our website at:

<http://www.olympiccoast.noaa.gov>.

To learn more about the sanctuary advisory council, please visit:

http://olympiccoast.noaa.gov/involved/sac/sac_welcome.html.

Office of National Marine Sanctuaries (ONMS)

Olympic Coast National Marine Sanctuary is one of the marine protected areas in the National Marine Sanctuary System encompassing more than 170,000 square miles of marine and Great Lakes waters from Washington State to the Florida Keys and from Lake Huron to American Samoa. The system includes thirteen national marine sanctuaries and Papahānaumokuākea and Rose Atoll marine national monuments. Visit the ONMS website at:

<http://sanctuaries.noaa.gov/>.

Get Involved!

To learn how to get involved in the sanctuary visit:

<http://olympiccoast.noaa.gov/involved/welcome.html>.

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